Work Order ID   68963

Tuesday, April 26, 2011 1:46:52 PM

Item ID: D3407-5	**Accept**
Revision ID:	
Item Name: Ring	

Start Date: 4/26/2011 **Start Qty:** 20.00

Required Date: 4/29/2011 **Req'd Qty:** 20.00

Reference:

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Approvals: **Process Plan:** ____ **Date:** 11-04-26 **Tooling:** ____ **Date:** ____

QC: ____ **Date:** ____ **SPC (Y/N):** ____ **Date:** ____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3407	Rev E								
100 Waterjet FLOW CNC Waterjet 17-4 .250×4"	FLOW WATER JET **Memo** 1-Cut as per Dwg D3407 Dwg Rev: E Prog Rev: E 2-Break edges on grinder as per Dwg D3407	0.00 0.00							B11-5-2
110 QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 0.00							B11-5-2

Deburr ⇒ m-t 11/05/03   22x 88

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES							
DATE	**STEP**	**PROCEDURE CHANGE**		**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Item ID: D3407-5   Accept

Revision ID:

Item Name: Ring

Start Date: 4/26/2011   **Start Qty:** 20.00

Required Date: 4/29/2011 **Req'd Qty:** 20.00

Reference:

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Approvals: **Process Plan:** _____ **Date:** _____   **Tooling:** _____ **Date:** _____

              QC: _____ **Date:** _____   **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00 ⊗ 11/05/03				*counts* (+22)	___	___	___
130 Packaging Packaging	Identify as per dwg & Stock Location: W/A 030 Memo *****STOCK IN LARGE FAB*****	0.00 0.00						EZ 11-5-3 (x22)	
140 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						11/5/4	

R 11-05-3
(22)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action — Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Tuesday, April 26, 2011 1:46:59 PM

Work Order ID: 68963

Parent Item: D3407-5

Parent Item Name: Ring

Start Date: 4/26/2011   **Required Date:** 4/29/2011

Start Qty: 20.00   **Required Qty:** 20.00

Comments: IPP Rev:A   New Issue   05-11-22 JLM
IPP Rev:B   Now on Waterjet 08-05-14 JLM   Verified By:DD
IPP Rev:C   08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174B0.250X4.000		Purchased	No			100	f	14.7000	0.2666	5.612632	6		
17-4 SS Bar .250 X 4.00													

	Location	Loc Qty	Loc Code
	MAT050	14.7	
	117130	14.7	117130

Dart Aerospace Ltd

W/O:		**WORK ORDER CHANGES**						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		**WORK ORDER NON-CONFORMANCE (NCR)**						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

DART AEROSPACE LTD		Work Order:	68983
Description: Tow Ring		Part Number:	D3407-5
Inspection Dwg: D3407 Rev: E			Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	**First Article**		**Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	.260	x			
Ø3.000	+/-0.030	3.011	x			
Ø2.050	+0.012/-0.001	2.055	x			
0.75	+/-0.030	.752	x			

Measured by:	R	Audited by:	C	Prototype Approval:	N/A
Date:	11-5-2	Date:	11/05/63	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.02.02	New Issue	KJ/JLM	
B	07.09.18	Tolerance revised	KJ/EC	
C	08.05.14	Dimensions updated per Dwg Rev D	KJ/JLM	
D	09.05.04	Dwg Rev updated	KJ/DD	

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

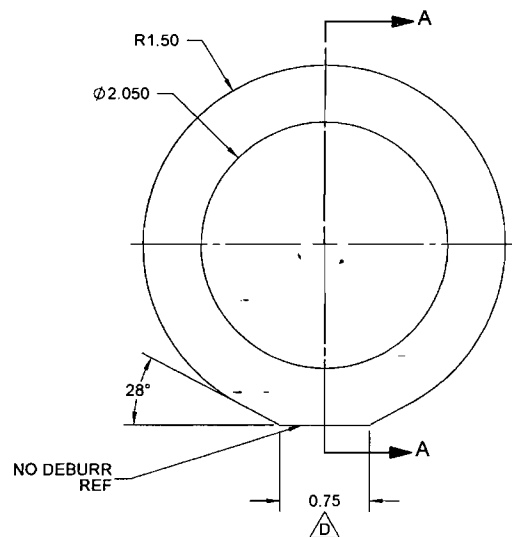Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 68443

R1.50

Ø2.050

28°

NO DEBURR
REF

A

A

0.75

/D\

D3407-5 RING

B

0.250

SECTION A-A

DEBURR 0.06
BOTH SIDES

DEBURR 0.01 TO 0.02
BOTH SIDES
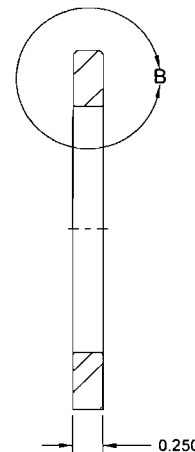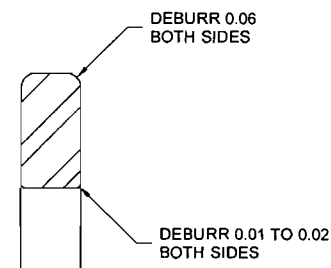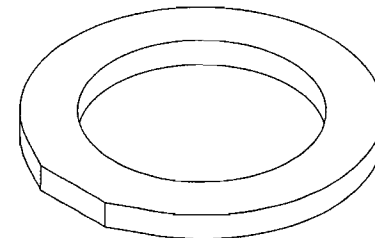
DETAIL B
SCALE 2X

RELEASED

NOTES:
1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: 0.27 lbs

DESIGN		**DART AEROSPACE USA, INC.**	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
DATE	08.07.23		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	Corrective Action Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries